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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,939	12/15/2006	Dominique Loubinoux	26218	7533

99658 7590 03/11/2011

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EXAMINER	
JUSKA, CHERYL ANN	
ART UNIT	PAPER NUMBER
1798	

NOTIFICATION DATE	DELIVERY MODE
03/11/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/577,939	LOUBINOUX, DOMINIQUE	
	Examiner	Art Unit	
	Cheryl Juska	1798	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-24,34-38,40,42-44 and 48-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-24,34-38,40,42-44 and 48-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed January 18, 2011, has been entered. Claims 17, 34, and 42 have been amended as requested. Claims 1-16, 25-33, 39, 41, and 45-47 have been cancelled. Thus, the pending claims are 17-24, 34-38, 40, 42-44, and 48-54.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 42-44 stand rejected under 35 U.S.C. 102(b) as being anticipated by US 2001/0032696 issued to Debalme et al. as set forth in section 5 of the last Office Action (Non-Final Rejection mailed 09/15/2010).

Applicant has amended independent claim 42 to limit the mat to being "formed by depositing said first and second yarns on a moving substrate to form a web." However, said amendment is insufficient to overcome the standing rejection. Specifically, in contrast to applicant's arguments (Amendment, page 9, 5th paragraph – page 10, 1st, paragraph), the amended claim does not necessarily exclude Debalme's embodiment, wherein the first yarns are deposited into one layer onto a first fabric, a second fabric is deposited thereon, and subsequently the second yarns are deposited onto said second fabric to form a multilayered web (sections

[0040] – [0047]). Note claim 42 does not limit the first and second yarns to being deposited simultaneously or in the same layer. Nor, does the claim exclude the presence of other layers (e.g., fabric) in the web. Hence, applicant's arguments are not commensurate in scope with the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, claims 42-44 stand rejected as being anticipated by the prior art.

Claim Rejections - 35 USC § 102/103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 48 stands rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the cited Debalme reference as set forth in section 7 of the last Office Action.

Applicant has not amended the claim or presented separate arguments against the rejection of said claim. As such, the rejection stands.

Claim Rejections - 35 USC § 103

6. Claims 17-24 stand rejected under 35 U.S.C. 103(a) as obvious over US 2001/0032696 issued to Debalme et al. alone or in view of WO 02/070806 issued to Loubinoux as set forth in

section 8 of the last Office Action. [Note US 7,226,518 is an English language equivalent of WO 02/070806.]

Applicant has amended independent claim 17 to limit the mat to having a mean thickness of approximately 3.5-6.5 mm. Debalme teaches one working example having a thickness of approximately 3 mm (section [0091]), while Loubinoux teaches a thickness range of a few tenths of mm to approximately 2 mm (col. 7, lines 33-35). However, it would have been readily obvious to a skilled artisan to modify the thickness depending upon the number of layers employed and the desired degree of bulk suitable for the intended use. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 205 USPQ 215. A skilled artisan would readily understand increasing the thickness of the Debalme working example could be achieved by adding more material or by reducing the degree of compression, wherein said increase in thickness would result in a bulkier, less dense, and more porous composite material. Such a material would facilitate the flow of thermoplastic material during molding. Thus, it would have been obvious to one of ordinary skill in the art to select a thickness within the range claimed. Hence, said amendment is insufficient to overcome the standing rejection over Debalme alone or in view of Loubinoux.

Additionally, applicant's argument regarding the rejection is insufficient to withdraw the rejection. Specifically, applicant argues that Debalme fails to teach or suggest the claimed basis weight (1500-3000 g/m^2) in combination with the claimed thickness (3.5-6.5 mm) (Amendment, page 7, 1st paragraph). Applicant asserts "If a mat based on the disclosure of Debalme et al. were adapted to have a weight within the range of 1500 to 3000 g/m^2, it would clearly have a smaller thickness than the range of thicknesses required by claim 17" (Amendment, page 7, 4th

paragraph). The examiner respectfully disagrees. Note in Debalme's working example, the formed multilayered sandwich has a thickness of approximately 5 mm before being compressed to a thickness of approximately 3 mm (section [0091]). Applicant's argument might be persuasive if the process of Debalme omitted the compression step, but due to the compression step, basis weight and thickness are not necessarily directly related. A decrease in the basis weight does not necessarily correlate to a decrease in thickness. A skilled artisan readily understands the relationships between basis weights, thickness, and density and the effects the compression step has on such relationships. Therefore, applicant's argument is found unpersuasive and the above rejection stands.

Regarding applicant's argument that Loubinoux fails to make up for the deficiencies of Debalme (Amendment, paragraph spanning pages 7-8), it is reiterated that a skilled artisan would readily understand increasing the thickness could be achieved by adding more material or by reducing the degree of compression, wherein said increase in thickness would result in a bulkier, less dense composite material. Such a material would facilitate the flow of thermoplastic material during molding. Thus, it would have been obvious to modify the thickness disclosed by Loubinoux in order to produce a composite material having the properties desired for an intended use. Hence, applicant's argument is found unpersuasive and the above rejection stands.

7. Claims 34-38 and 40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Debalme reference in view of US 2005/0118390 issued to Wagner et al. or US 6,407,018 issued to Zafiroglu as set forth in section 9 of the last Office Action.

Applicant has amended claim 34 to limit the mat to being "formed by depositing said first and second yarns on a moving substrate to form a web, and wherein said first and second yarns

are not commingled yarns." However, said amendment is insufficient to overcome the standing rejection. Specifically, as noted in the last Office Action, in the event that the claims are amended to positively limit the final product to being constructed of said first yarns and second yarns that are not commingled yarns, the claims are still held to be obvious over the prior art. Note Debalme teaches prior art fiberglass reinforced composites comprise a combination of glass fiber yarns and thermoplastic yarns (section [0002]). In particular, Debalme teaches it is known to form a composite from fabrics woven of yarns consisting of reinforcing fibers and yarns consisting of thermoplastic fibers (section [0003]). See also GB 2093768, an English language equivalent of FR 2500360 cited by Debalme. Hence, the amendment precluding the first and second yarns from being commingled yarns does not render the claims unobvious over the prior art.

Additionally, it is noted that the limitation "not commingled yarns" does not exclude a mixture of yarns. See specification, page 4, line 35 - page 5, line 4. To one of ordinary skill in the art, mixed yarns would have been an obvious variant to commingled yarns. Mixed yarns differ from the commingled yarns in that said mixed yarns are not intimately mixed. Thus, it would have been readily obvious to a skilled artisan to substitute mixed yarns for the commingled yarns of Debalme.

Furthermore, as argued above, the limitation to the mat being formed by depositing the yarns on a moving substrate to form a web is insufficient to render the claims unobvious. Therefore, the rejection of claims 34-38 and 40 stands.

In response to applicant's arguments traversing the rejection (Amendment, paragraph spanning pages 8-9), it is noted that the feature upon which applicant relies (i.e., "a deformable

mat that is formed entirely of yarns that are not commingled yarns") is not necessarily recited in the rejected claim. The mat is not limited to consisting of only the first and second non-commingled yarns. Rather, the claims allow for the presence of other yarns, including commingled yarns in said mat. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's argument that FR 2500360 (GB 2093768 issued to Sollett) does not teach the presently claimed mat formed by the recited step of depositing (Amendment, paragraph spanning pages 8-9), it is argued that the claim limitation of "formed by depositing said first and second yarns on a moving substrate to form a web, and wherein said first and second yarns are not commingled yarns" does not necessarily exclude the layers of superposed fabric disclosed by Sollett. In particular, the claim recitation does not necessarily limit the structural relationship of the first and second yarns to being a nonwoven web. The claim limitation can read on a woven fabric web in that the recited depositing step does not exclude the yarns from being interlaced prior to depositing. The step of depositing on a moving substrate is only given patentable weight to the extent that said step materially affects the final structure of the claimed product. The presence of process limitations on product claims in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to the product. In re Stephens, 145 USPQ 656. In the present case, the step depositing yarns onto a moving substrate to form a web does not necessarily limit the web to being a nonwoven web. Thus, applicant's argument is found unpersuasive and the above rejection stands.

8. Claims 49, 51, and 52 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Debalme reference in view of WO 02/070806 issued to Loubinoux as set forth in section 10 of the last Office Action. [Note US 7,226,518 is an English language equivalent of WO 02/070806.]

Applicant has not amended the claim or presented separate arguments against the rejection of said claim. As such, the rejection stands.

9. Claim 50 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Debalme reference as set forth in section 11 of the last Office Action.

Applicant has not amended the claim or presented separate arguments against the rejection of said claim. As such, the rejection stands.

10. Claim 53 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Debalme reference alone or in view of WO 02/070806 issued to Loubinoux as set forth in section 12 of the last Office Action.

Applicant has not amended the claim or presented separate arguments against the rejection of said claim. As such, the rejection stands.

11. Claim 54 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Debalme reference in view of US 2005/0118390 issued to Wagner et al. or US 6,407,018 issued to Zafiroglu as set forth in section 13 of the last Office Action.

Applicant has not amended the claim or presented separate arguments against the rejection of said claim. As such, the rejection stands.

Conclusion

12. The part made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner can be emailed at cheryl.juska@uspto.gov or the examiner's supervisor, Angela Ortiz can be reached at 571-272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl Juska/
Primary Examiner
Art Unit 1798

cj
March 8, 2011